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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/564,728

01/17/2006

Kenichiro Nakamura

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EXAMINER

PATEL, RITA RAMESH

ART UNIT

PAPER NUMBER

1792

MAIL DATE

DELIVERY MODE

07/15/2008

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/564,728	<b>Applicant(s)</b> NAKAMURA ET AL.	
	<b>Examiner</b> RITA R. PATEL	<b>Art Unit</b> 1792	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-4 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-4 is/are rejected.
- 7) ☒ Claim(s) 2 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 17 January 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)            | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | Paper No(s)/Mail Date. _____                                      |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date <u>1/17/06</u> .   | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

The preliminary amendment filed 1/17/06 has been reviewed and accepted.

### ***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claims 3 and 4 recite the limitation "the rotary motor" in lines 6 and 7 (claim 3) and line 5 (claim 4). There is insufficient antecedent basis for this limitation in the claim. Furthermore it is unclear if "rotary motor" is a misspelling of "servomotor" or if it is a separate and unique motor; clarification is requested.

### ***Claim Objections***

Claim 2 is objected to because of the following informalities: in claim 1 servomotor is spelled differently than in claim 2, where it is spelled as "servo motor". According to the specification, the term "servomotor" is used consistently. There appears to be a typo in claim 2. Appropriate correction is required.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

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(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-2 are rejected under 35 U.S.C. 102(b) as being anticipated by Lammert et al. herein referred to as "Lammert" (Pub. No.: US 200/0170579).

Lammert teaches a spray cleaning apparatus for semiconductor wafers comprising at least a fluid nozzle 3 (treating tool), bracket 49 (operating shaft), bracket 50 (bracket), bracket 17 (attaching frame), and a continuous loop belt 10 is supported between a pair of pulleys 12, 13 and belt 10 is moved by servo-motor 15 (servomotor). Bracket 17 is mounted to straight rail 16. Positioning of the wafer occurs by the illustrated servo-motor driven belt type system (see Figure 11) for the x and y-axis and a pneumatic stepper motor 29 (rotary motor) for theta rotation (Paragraphs [0032]-[0033]).

Controller 9 provides signals to control movement of the servo-motor. Inherently, the amount of torque supplied from the servomotor corresponds directly to the weights of the treating tool and shaft.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over Lammert.

It is unclear what makes-up Applicant's claims for a "rotary motor". Is this a typo for the term "servomotor"? If so, this would not make sense since the servomotor as claimed in claim 2 requires the servomotor to correspond to the weights of the treating tool and operating shaft accordingly, however in claims 3 and 4 it is claimed that the weight of the motor is not applied to the operating shaft; these are opposite and contradictory claims.

Is the claim for a "rotary motor" merely a separate motor attached to the operating shaft which employs rotational movement? If so, Lammert teaches a stepper motor 29 for applying rotational movement to the substrate, it would have been obvious to one of ordinary skill in the art at the time of the invention to reposition this motor by connecting the motor 29 and its designated bracket 25 to connect directly to the fluid nozzle 3 to allow rotational movement of the treating tool. Repositioning the motor to achieve the same function of rotary movement does not present any new or unknown benefits. Consolidating the servo-motor and stepping motor to connect to fluid nozzle would have been obvious to one of ordinary skill in the art at the time of the invention since rearrangement of parts was held to have been obvious. *In re Japikse* 86 USPQ 10 (CCPA 1950). Thus allowing only a single moving apparatus, which would be the fluid nozzle, and minimizing the number of moving pieces which may accidentally collide into one another.

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Wang (Patent No. 5,948,203) teaches an apparatus for chemical-mechanical-polishing of a wafer by an adjustable arm assembly.

Sanders et al. (Patent No. 6,006,637) teaches a servo driven watercutter for cutting a moving substrate including a cutter nozzle connected to a movable support driven by a servo motor.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to RITA R. PATEL whose telephone number is (571)272-8701. The examiner can normally be reached on M-F: 9-6.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Michael Barr can be reached on (571) 272-1414. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Michael Barr/  
Supervisory Patent Examiner, Art  
Unit 1792

/Rita R. Patel/  
Examiner, Art Unit 1792